

# BRUSH MANAGEMENT

## PRACTICE INTRODUCTION

USDA, Natural Resources Conservation Service - practice code 314



### BRUSH MANAGEMENT

Brush management is removal, reduction, or manipulation of tree and shrub species.

### PRACTICE INFORMATION

This is a multipurpose practice that applies on rangeland, native or naturalized pasture, pasture, or haylands where tree and/or shrub species are competing with forage species.

The brush management practice is designed to achieve the optimum level of control of the target woody specie (s) and protection of the desired specie (s). This will be accomplished by mechanical, chemical, biological, prescribed burning or a combination of these techniques. The practice is also planned and applied to meet the habitat requirements of fish and wildlife.

To ensure an enduring desired response to brush management, the conservation plan will include the grazing management practice labeled *Prescribed Grazing*.

Brush Management is applied to accomplish one or more of the following:

1. Restore natural plant community balance.
2. Create the desired plant community.
3. Reduce competition for space, moisture and sunlight to favor the desired species.
4. Manage noxious woody plants
5. Restore vegetation to control erosion and sedimentation, improve water quality, and enhance stream flow.
6. Maintain or enhance wildlife habitat including threatened and endangered species.
7. Improve forage accessibility, quality, and quantity for domestic and wild animals.
8. Protect life and property from wildfire.
9. Improve visibility and access for handling livestock.

Additional information including specifications are on file in the local NRCS Field Office Technical Guide.

The following pages contain the conservation effects expected to occur when this practice is applied. These effects are subjective and somewhat dependent on variables such as climate, terrain, soil, etc. Users are cautioned that these effects are estimates that may or may not apply to a specific site.

## CONSERVATION PRACTICE PHYSICAL EFFECT WORKSHEET

NOTE: recorded in Microsoft word 6.0 - use tabs to change cells/fields

|   |      |              |  |      |         |
|---|------|--------------|--|------|---------|
| STATE   | Iowa | FIELD OFFICE |  | DATE | 12/5/96 |
| <b>PRACTICE:</b> 314 Brush Management                     |      |              | NOTES: These effects are based primarily on improving vegetative cover and using the appropriate methodology.      |      |         |
| <b>RESOURCE: SOIL</b><br><b>RESOURCE CONCERN: EROSION</b> |      |              | <b>Help Message: Click on form field for choice lists.</b><br><b>Tab key to move around. "N/A" is the default.</b> |      |         |
| <b>RESOURCE INDICATORS</b>                                |      |              | <b>PHYSICAL EFFECTS</b>  |      |         |
| SHEET AND RILL  |      |              | significant reduction in sheet and rill erosion  |      |         |
| WIND  |      |              | significant reduction in wind erosion  |      |         |
| EPHEMERAL GULLY   |      |              | significant reduction in ephemeral gully erosion   |      |         |
| CLASSIC GULLY   |      |              | slight reduction in classic gully erosion  |      |         |
| STREAMBANK  |      |              | moderate reduction in streambank erosion   |      |         |
| IRRIGATION INDUCED  |      |              | N/A  |      |         |
| SOIL MASS MOVEMENT  |      |              | insignificant  |      |         |
| ROADBANK/CONSTRUCTION                                     |      |              | N/A  |      |         |
| OTHER   |      |              |  |      |         |
| <b>RESOURCE CONCERN: SOIL CONDITION</b>                   |      |              |  |      |         |
| SOIL TILTH  |      |              | moderate improvement in tilth  |      |         |
| SOIL COMPACTION   |      |              | moderate reduction in soil compaction  |      |         |
| SOIL CONTAMINATION  |      |              |  |      |         |
| • SALTS   |      |              | insignificant  |      |         |
| • ORGANICS  |      |              | insignificant  |      |         |
| • FERTILIZERS   |      |              | insignificant  |      |         |
| • PESTICIDES  |      |              | insignificant  |      |         |
| • OTHER   |      |              |  |      |         |
| DEPOSITION/DAMAGE   |      |              |  |      |         |
| • ONSITE  |      |              | significant reduction/onsite deposition damage   |      |         |
| • OFFSITE   |      |              | significant decrease/offsite deposition damage   |      |         |
| DEPOSITION/SAFETY   |      |              |  |      |         |
| • ONSITE  |      |              | significantly improve onsite safety/deposition   |      |         |
| • OFFSITE   |      |              | sign. improve offsite safety hazard/deposition   |      |         |
| OTHER   |      |              |  |      |         |
| <b>RESOURCE: WATER</b>                                    |      |              |  |      |         |
| <b>RESOURCE CONCERN: WATER QUANTITY</b>                   |      |              |  |      |         |
| SEEPS   |      |              | insignificant  |      |         |
| RUNOFF/FLOODING   |      |              | moder. decrease in runoff/flooding   |      |         |
| EXCESS SUBSURFACE WATER                                   |      |              | slight reduction in excess subsurface water  |      |         |
| INADEQUATE OUTLETS  |      |              | moderate improvement in H2O outlet concern   |      |         |
| WATER MGT. IRRIGATION                                     |      |              |  |      |         |
| • SURFACE   |      |              | N/A  |      |         |
| • SPRINKLER   |      |              | N/A  |      |         |
| WATER MGT. NON-IRRIGATED                                  |      |              | moderate improvement in moisture use   |      |         |
| RESTRICTED FLOW CAPACITY (H2O convey.)                    |      |              |  |      |         |
| • ONSITE  |      |              | moderate improvement in onsite drainage  |      |         |
| • OFFSITE   |      |              | moderate improvement in offsite drainage   |      |         |
| RESTRICTED STORAGE  |      |              | moderate reduction in sedimentation of H2O storage   |      |         |
| OTHER   |      |              |  |      |         |

RESOURCE: **WATER**

RESOURCE CONCERN: **WATER QUALITY**

| <b>RESOURCE</b>             | <b>PHYSICAL EFFECTS</b>                            |
|-----------------------------|--|
| GROUNDWATER CONTAMINANTS    |  |
| • PESTICIDES                | insignificant                                      |
| • NUTRIENTS AND ORGANICS    | insignificant                                      |
| • SALINITY                  | insignificant                                      |
| • HEAVY METALS              | insignificant                                      |
| • PATHOGENS                 | insignificant                                      |
| • OTHER                     |  |
| SURFACE WATER CONTAMINANTS  |  |
| • PESTICIDES                | moderate reduction in SWater contam./pesticides    |
| • NUTRIENTS AND ORGANICS    | moderate reduction in SWater contam./nutri.,organ. |
| • SUSPENDED SEDIMENTS       | sign. reduction in SWater contam./susp. sedi.      |
| • LOW DESOLVED OXYGEN       | sign. reduction in SWater contam./low oxygen       |
| • SALINITY                  | insignificant                                      |
| • HEAVY METALS              | insignificant                                      |
| • WATER TEMPERATURE         | insignificant                                      |
| • PATHOGENS                 | slight decrease in SWater contam./pathegens        |
| AQUATIC HABITAT SUITABILITY | N/A  |
| OTHER                       |  |

RESOURCE: **AIR**

RESOURCE CONCERN: **AIR QUALITY**

|   |  |
|---|--|
| AIRBORNE SEDIMENT AND SMOKE PARTICLES         |  |
| • ONSITE SAFETY                               | moder. decrease in airborn sed.&smoke part./safety |
| • OFFSITE SAFETY                              | moder. decrease in airborn sed.&smoke part./safe   |
| • ONSITE STRUCT. PROBLEMS                     | moder. decrease in struct.problems/dust and smoke  |
| • OFFSITE STRUCT. PROBLEMS                    | moder. decrease in structural problems/dust&smoke  |
| • ONSITE HEALTH                               | moder. decrease in onsite health prob./dust&smoke  |
| • OFFSITE HEALTH                              | mod. improvement in offsite health                 |
| AIRBORNE SEDIMENT CAUSING CONVEYANCE PROBLEMS | moder. decrease in airborn sediment/convey. prob.  |
| AIRBORNE CHEMICAL DRIFT                       | insignificant                                      |
| AIRBORNE ODORS                                | insignificant                                      |
| FUNGI, MOLDS, AND POLLEN                      | insignificant                                      |
| OTHER   |  |

RESOURCE CONCERN: **AIR CONDITION**

|                                 |               |
|---------------------------------|---------------|
| AIR TEMPERATURE                 | insignificant |
| AIR MOVEMENT (windbreak effect) | insignificant |
| HUMIDITY                        | insignificant |
| OTHER                           |               |

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|  |   |
|--|---|
| RESOURCE: <b>HUMAN</b>                           |   |
| RESOURCE CONCERN: <b>SOCIAL CONSIDERATIONS</b>   |   |
| <b>RESOURCE INDICATORS</b>                       | <b>PHYSICAL EFFECTS</b>                         |
| PUBLIC HEALTH AND SAFETY                         | situational concerning public health and safety |
| PRIVATE/PUBLIC VALUES                            | situational regarding private/public values     |
| CLIENT CHARACTERISTICS                           | situational regarding client characteristics    |
| RISK TOLERANCE                                   | situational regarding risk                      |
| TENURE   | situational regarding tenure                    |
| OTHER  |   |
| RESOURCE CONCERN: <b>CULTURAL CONSIDERATIONS</b> |   |
| ABSENCE/PRESENCE OF CULTURAL RESOURCES           | situational regarding cultural resources        |
| SIGNIFICANCE OF CULTURAL RESOURCES               | situational regarding cultural resources        |
| MITIGATION OF NEGATIVE CULTURAL RES. IMPACTS     | situational regarding cultural resources        |
| OTHER  |   |
|  |   |
|  |   |
|  |   |